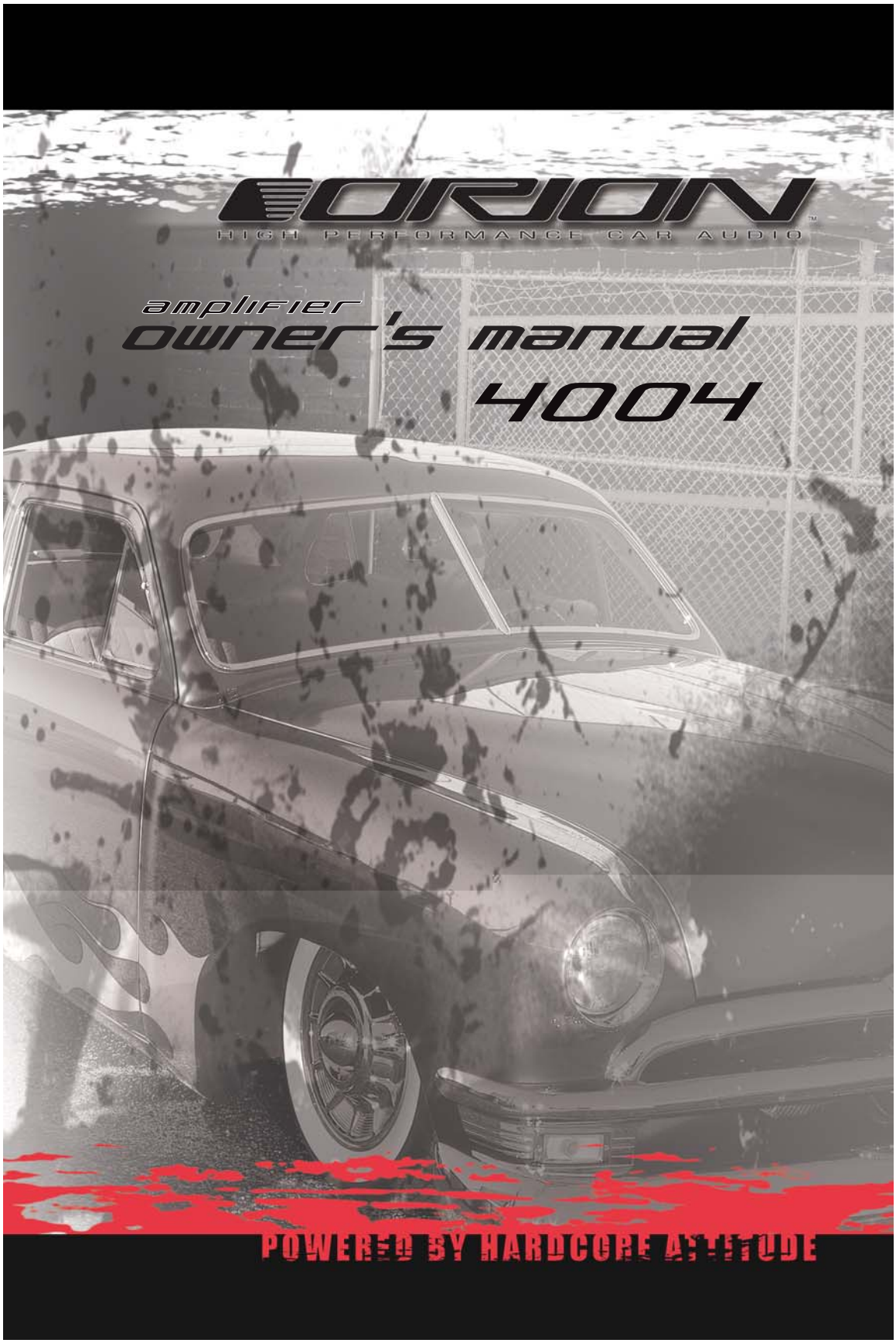
ORION
HIGH PERFORMANCE CAR AUDIO
amplifier
owner's manual
4004
POWERED BY HARDCORE ATTITUDE

CONTENTS

Introduction 2
What's In The Box 2
Practice Safe Sound™ 2
Limited Two-Year Consumer Warranty 3
Record Your Serial Number and Date 3
Specifications 4
Amplifier Controls and Connections 5
Amplifier Settings 6
Four-Channel Amplifier Input Configuration 6
Internal Crossover Configuration 6
Low-Pass Crossover (Front and Rear) 6
High-Pass Crossover (Front and Rear) 6
INTELLi Bass Control 7
Amplifier Wiring 7
Power Connections 7
Speaker Connections 8
Amplifier installation 11
Choosing Mounting Locations 11
Passenger Compartment 11
Trunk Compartment 11
General Precautions and Installation Tips 11
Tools of the Trade 12
Step By Step Installation 12
Set Up and Troubleshooting 13
Testing the System 13
Adjusting the Sound of the System 14
Troubleshooting Tips 15
Notes 17

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INTRODUCTION

Thank you for your purchase of Orion's 4004 amplifier. Each Orion amplifier is designed to be the leader in its class offering the most power, advanced features, and ease of use. Orion amplifiers are designed as the best affordable high end car audio amplifier money can buy. Listed below are the features of the new Orion 4004.

- **4004 -** 50 Watts per channel, four-channel amplifier with dual built-in high-pass and low-pass 12dB/octave crossover centered at 100Hz and INTELLi Bass. The 4004 is capable of 6, 5, 4, 3, or 2 channel operation with a maximum power capability of 400 Watts into 4W stereo (front and rear channels bridged.)

The installation of all Orion amplifiers will determine the overall performance result. Improper installation will not only limit the performance of your Orion system, but also potentially compromise the reliability of the amplifier. To ensure proper sonic results and component reliability, please refer to your authorized Orion dealer for installation assistance or advice. If you decide to perform the installation yourself, be sure to read the entire manual before beginning the installation.

What's In The Box

- (1) Amplifier
- (1) Extra Fuses
- (2) High Level Input Harness
- (1) Allen Wrench 2.5mm
- (1) Allen Wrench 3mm
- (4) #8 self-tapping black Phillips head pan head screws
- (1) Amplifier installation and operation manual

PRACTICE SAFE SOUND™

Continuous exposure to sound pressure levels over 100dB may cause permanent hearing loss. High power automotive sound systems can generate sound pressure levels in excess of 130dB. When playing your system at high levels, please use hearing protection and avoid long term exposure.

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LIMITED TWO-YEAR CONSUMER WARRANTY

Directed Electronics, Inc. promises to the original purchaser, to replace this product should it prove to be defective in workmanship or material under normal use, for a period of two years from the date of purchase by the dealer as indicated by the date code marking of the product **PROVIDED** the product was installed by an authorized Directed dealer. During this two year period, there will be no charge for this replacement **PROVIDED** the unit is returned to Directed, shipping pre-paid. If the unit was installed by anyone other than an authorized Directed dealer, the warranty period will be 1 year from date of purchase by the dealer as indicated by the date code marking of the product. During this 1 year period, there will be no charge for this replacement **PROVIDED** the unit is returned to Directed, shipping pre-paid. This warranty is non-transferable and does not apply to any unit that has been modified or used in a manner contrary to its intended purpose, and does not cover damage to the unit caused by installation or removal of the unit. This warranty is void if the product has been damaged by accident or unreasonable use, neglect, improper service or other causes not arising out of defects in materials or construction. **ALL WARRANTIES INCLUDING BUT NOT LIMITED TO EXPRESS WARRANTY, IMPLIED WARRANTY, WARRANTY OF MERCHANTABILITY, FITNESS FOR PARTICULAR PURPOSE, AND WARRANTY OF NON-INFRINGEMENT OF INTELLECTUAL PROPERTY ARE EXPRESSLY EXCLUDED TO THE MAXIMUM EXTENT ALLOWED BY LAW, AND DIRECTED NEITHER ASSUMES NOR AUTHORIZES ANY PERSON TO ASSUME FOR IT ANY LIABILITY IN CONNECTION WITH THE SALE OF THE PRODUCT. DIRECTED HAS ABSOLUTELY NO LIABILITY FOR ANY AND ALL ACTS OF THIRD PARTIES INCLUDING ITS AUTHORIZED DEALERS OR INSTALLERS.** Unit must be returned to Directed, postage pre-paid, with: consumer's name, telephone number, and address, authorized dealer's name and address, and product description. **IN ORDER FOR THIS WARRANTY TO BE VALID, YOUR UNIT MUST BE SHIPPED WITH PROOF OF INSTALLATION BY AN AUTHORIZED DIRECTED DEALER. ALL UNITS RECEIVED BY DIRECTED FOR WARRANTY REPAIR WITHOUT PROOF OF DIRECTED DEALER INSTALLATION WILL BE COVERED BY THE LIMITED 1 YEAR PARTS AND LABOR WARRANTY. BY PURCHASING THIS PRODUCT, THE CONSUMER AGREES AND CONSENTS THAT ALL DISPUTES BETWEEN THE CONSUMER AND DIRECTED SHALL BE RESOLVED IN ACCORDANCE WITH CALIFORNIA LAWS IN SAN DIEGO COUNTY, CALIFORNIA.**

NOTE: This warranty does not cover labor costs for the removal and reinstallation of the unit.

Record Your Serial Number and Date

Model: _____

Serial Number: _____

Date of Purchase: _____

Purchased from: _____

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SPECIFICATIONS

Amplifier Section	
Power Output 4W Stereo (Watts)[1]	50 x 4
Power Output 2W Stereo (Watts)[2]	100 x 4
Power Output 4W Mono (Watts)[3]	200 x 2
Distortion - all channels driven at rated power (20Hz to 20kHz)	< 0.1% THD+N
Frequency Response	20Hz to 20kHZ ±0.25dB
Linear Bandwidth	10Hz to 50kHz ±3dB
Signal-to-Noise Ratio at Rated Power	> 100dB
Damping Factor	> 200
Slew Rate	> 20V per msec
RCA Input Sensitivity	200mV to 5V
High Level Input Sensitivity	1V to 10V
Input Impedance	10kW
Fuse Type	(2) 30 Amp ATC
Dimensions	15.9" x 10.5" x 2.4"
Weight	11 lbs
Crossover Section	
Low Pass Crossover	Continuously Variable 2nd Order (12dB per octave)
Low Pass Frequency Range	20Hz to 3kHz
High Pass Crossover	Continuously Variable 2nd Order (12dB per octave)
High Pass Frequency Range	20Hz to 3kHz
INTELLi Bass	16dB boost
INTELLi Bass Center Frequency	45Hz

1. All channels driven, continuous 4W load 20Hz to 20kHz, < 0.05% THD, with input voltage at 13.8VDC.
2. All channels driven, continuous 2W load 20Hz to 20kHz, < 0.1% THD, with input voltage at 13.8VDC.
3. All channels driven, continuous 4W load 20Hz to 20kHz, < 0.1% THD, with input voltage at 13.8VDC.

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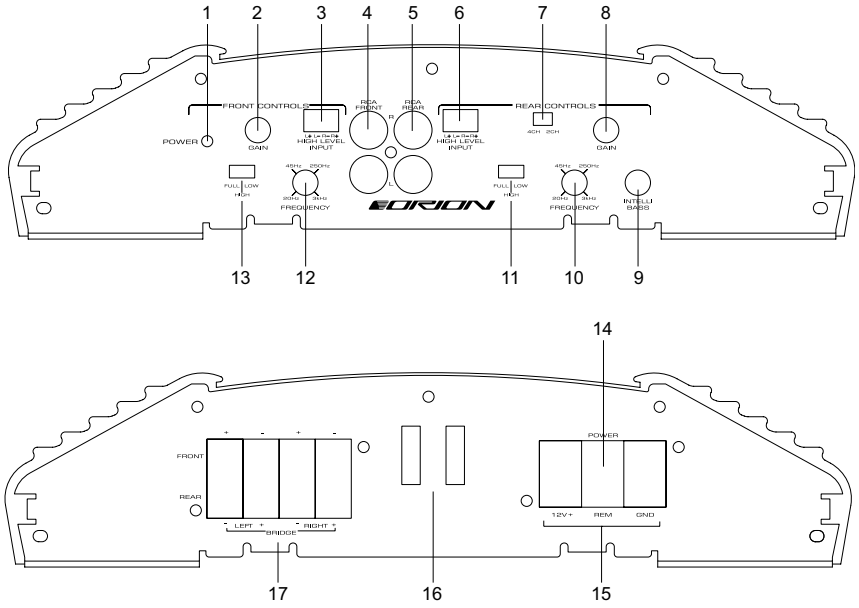
AMPLIFIER CONTROLS AND CONNECTIONS



1. **Power LED -** when lit indicates that the amplifier is on.
2. **Front Gain Control -** continuously adjusts from 200mV to 5V for full power output.
3. **Front High-Level Input Connector -** accepts input from head unit's speaker output.
4. **Front RCA Inputs -** accepts RCA input from a source unit, preamplifier, or equalizer.
5. **Rear RCA Inputs -** accepts RCA input from a source unit, preamplifier, or equalizer.
6. **Rear High-Level Input Connector -** accepts input from head unit's speaker output.
7. **4 CH / 2 CH Switch -** configures the amplifier for two or four inputs.
8. **Rear Gain Control -** continuously adjusts from 200mV to 5V for full power output.
9. **INTELLI Bass Control -** continuously adjusts from 0 to 16dB of boost centered at 45Hz on the rear channels.
10. **Rear Frequency Control -** continuously adjusts the frequency of the rear crossover.
11. **Rear Crossover Switch -** controls the type of filter for the onboard active rear crossover. Full does not attenuate any frequencies and is for full range speaker systems. High attenuates low frequencies and is used for mid-range speakers and tweeters. Low attenuates high frequencies and is used for subwoofer speakers.
12. **Front Frequency Control -** continuously adjusts the frequency of the front crossover.
13. **Front Crossover Switch -** controls the type of filter for the onboard active rear crossover. Full does not attenuate any frequencies and is for full range speaker systems. High attenuates low frequencies and is used for mid-range speakers and tweeters. Low attenuates high frequencies and is used for subwoofer speakers.
14. **REM Remote Turn-On Input -** turns on the amplifier when fed 12 V+.

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15. **Power Connections -** accepts greater than eight-gauge power and ground cables.
16. **2 x 30A ATC Fuses -** protect the amplifier from over current situations.
17. **Speaker Connections -** accepts up to 12-gauge speaker wire.

AMPLIFIER SETTINGS

Four-Channel Amplifier Input Configuration

The 4CH / 2 CH switch routes input from the front inputs to the rear section of the amplifier. This allows the Orion 4004 channel amplifier to utilize a single set of RCA's or high-level inputs to feed signal to both the front and rear channels of the amplifier.

When the switch is to the right (2 CH position), signal from the front inputs is routed to the rear channels. When the switch is to the left (4 CH position), front and rear inputs are independent. This allows a source unit with an internal fader to fade between the front and rear outputs.

Internal Crossover Configuration

The crossover section of Orion 4004 amplifiers are continuously variable and extremely flexible. The internal crossovers in your Orion 4004 amplifier are continuously variable and extremely flexible. The separate front and rear controls with variable frequency and selectable high-pass, low-pass, or full-range settings allow you to configure the amplifier to drive many different speaker and subwoofer system configurations.

When using Orion loudspeakers, minor deviations from the recommended frequency ranges can provide superior results depending on your speaker locations and your vehicle acoustics. Setting crossover frequencies higher than recommended will not cause damage and may provide superior sonic results depending on your system's performance goals. Refer to your loudspeaker owner's manual for assistance in choosing the proper crossover frequencies for your system.

WARNING! DO NOT set crossover frequencies lower than the speakers recommended operating range. This can cause driver failure that is not covered by manufacturer's warranty.

Low-Pass Crossover (Front and Rear)

When the switch is to the left (FULL position), the low-pass crossover is bypassed. When the switch is to the right (LOW position), the low-pass crossover is active. The low-pass crossover is continuously variable from 20Hz to 3kHz.

High-Pass Crossover (Front and Rear)

When the switch is to the left (FULL position), the high-pass crossover is bypassed. When the switch is in the middle (HIGH position), the high-pass crossover is active. The high-pass crossover is continuously variable from 20Hz to 3kHz.

Input Gain

The Orion 4004 amplifier has separate front and rear level gain adjustments. The input sensitivity of these adjustments range from 200mV up to 5V on the RCA inputs and 1V to 10V on the high-level inputs. This allows easy integration from any source unit either with RCA outputs or speaker outputs. Refer to the *Testing the System* and the *Adjusting the Sound of*

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the System sections for detailed instructions on setting up the level controls.

INTELLi Bass Control

INTELLi Bass on the rear channels maximizes the performance of a subwoofer and allows for continuous adjustment of low frequency boost on the rear channels. INTELLi Bass can be adjusted from 0dB to 16dB of boost centered at 45Hz. Initially the Q is very low (wide). As INTELLi Bass is added, the Q rises (narrows). This allows the Orion 4004 to overcome acoustic deficiencies in your vehicle. The type of enclosure used, the sub-woofer's excursion capability, personal preference, and attitude determine acceptable boost levels.

WARNING! Exercise caution when setting INTELLi Bass. Maximum boost can potentially cause woofer damage due to overexcursion.

AMPLIFIER WIRING

Power Connections

- Fuse Size: (2) 30 AMP ATC
- Minimum eight-gauge power and ground cable is recommended for acceptable performance.
- Fuse power wire prior to wire passing through panels or near sharp edges and less than 18" from battery.
- Ground the amplifier to a good chassis ground as close as possible to the amplifier.
- Add extra ground wire (minimum eight-gauge) between the negative terminal of the battery and the chassis.

NOTE: The addition of a ground wire from the battery to the chassis of the vehicle improves the ability of the battery to supply power to the amplifier. This helps especially in newer vehicles, where the current delivery of the factory electrical system was designed only to accommodate electronics supplied by the auto manufacturer.

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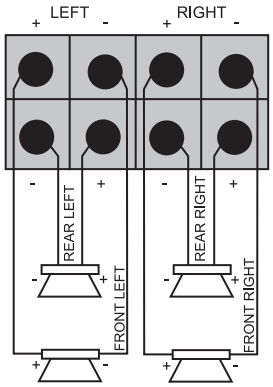
Speaker Connections

Four Channel Stereo Configuration

- Front and rear channel lowest recommended impedance is 2W stereo.
- Crossover mode, output, and gain configurations are independently adjustable between the front and rear channels.
- Two-channel or four-channel input can be used for this configuration. For source unit fading, use the four-channel input mode.
- Front and rear outputs can be configured for high-pass, low-pass, or full range operation.



Three Channel Stereo/Bridged Configuration

- Front channels are configured for two-channel stereo operation.
- Front channel lowest recommended impedance is 2W stereo.
- Rear channels are configured for a single channel bridged output.
- Rear channel lowest recommended impedance is 4W.
- Crossover mode, output, and gain configurations are independently adjustable between the front and rear channels.
- Two-channel or four-channel input can be used for this configuration. For source unit fading, use the four-channel input mode.
- Front and rear outputs can be configured for high-pass, low-pass, or full range operation.
- Rear outputs are configured for summed bridged operation for subwoofers.

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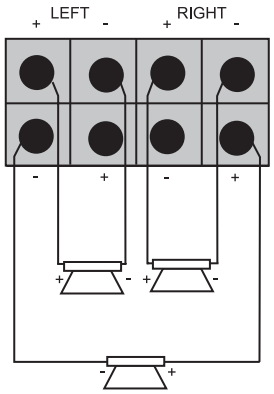
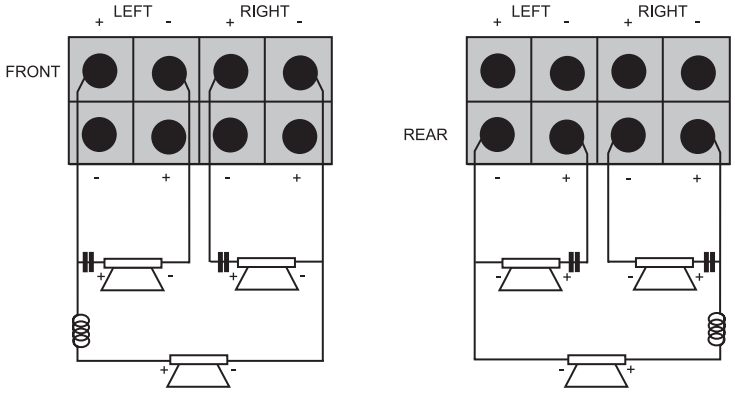


Tri-Mode Six Channel Configuration

- Lowest recommended impedance is 2W stereo and 4W bridged mono.
- Front and rear outputs must be set for full range operation.
- Passive crossovers must be used on all components and frequencies must not overlap.

WARNING! Failure to observe these requirements may result in damage to the amplifier.



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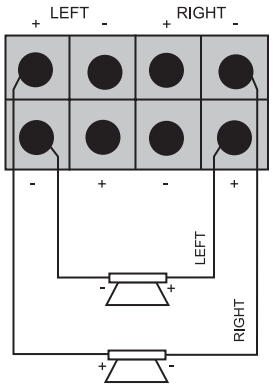
Two Channel Bridged Configuration

- Front and rear channels are configured for bridged two-channel operation
- Lowest recommended impedance for both front and rear channels is 4W
- Crossover and gain configurations are independently adjustable between the front and rear channels
- Two-channel operation is recommended for this operational mode.
- Front and rear outputs can be configured for high-pass, low-pass, or full range operation.
- Front and rear outputs can be configured for stereo (right channels will have right output, left channels will have left output) or summed two-channel operation (front speaker bridged, rear speaker bridged).



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AMPLIFIER INSTALLATION

Choosing Mounting Locations

The location of your amplifier will depend on several important issues. Due to the low profile size of the Orion amplifiers, there are many possible installation locations that will yield satisfactory amplifier performance. Always mount the amplifier in a place that protects the amplifier from the elements. In addition, mount the amplifier on a stable, flat surface.

NOTE: Mounting amplifiers upside down is not recommended and may cause premature thermal shutdown.

WARNING! Do not mount any amplifier in the engine compartment. Amplifiers are not designed to endure the harsh environment of the exterior elements.

Passenger Compartment

If you are going to mount the amplifier in the passenger compartment, make sure you have adequate room for ventilation. The amplifiers have been designed to make under-seat mounting possible. When mounting your amplifier under a seat or similar area, keep a minimum of 1" of clearance around the amplifier for adequate cooling.

Trunk Compartment

Mounting your amplifier in the trunk provides excellent performance as long as you do not restrict the airflow around the heatsink of the amplifier. For optimal results, mount the amplifier with as much clearance as possible. This type of mounting will yield the best cooling due to the convection effect of the amplifier chassis.

General Precautions and Installation Tips

WARNING! Be careful not to cut or drill into gas tanks, fuel lines, brake lines, hydraulic lines, vacuum lines, or electrical wiring when working on your vehicle.

Disconnect the vehicle's ground wire at the battery before making or breaking connections to the audio system's power supply terminals.

Do not use this amplifier unmounted. Failing to securely mount the amplifier can result in damage or injury, particularly in the event of an accident. An unmounted amplifier becomes a dangerous projectile in the event of a crash. Never mount the amplifier where it might get wet. Mount the amplifier so the wire connections will not be pulled. Route the wires where they will not be scraped, pinched or damaged in any fashion.

The +12V power supply wire must be fused as close as possible to the battery terminal, ideally within 18". Use the recommended fuse size or circuit breaker listed in the *Power Connections* section of this manual.

If you need to replace the fuse plugged into the side of the amplifier, replace the fuse with the same size ATC / MAXI type fuse that came with the amplifier. If you are not sure as to the correct value, refer to the *Power Connections* section of this manual for details. Using a higher current fuse may result in damage to the amplifier that is not covered under warranty.

NOTE: Make sure all the equipment in the system is turned off when making or breaking connections to the input RCA's or speaker terminals. Turn on the system and slowly turn up the volume control only after double checking all wire connections.

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Power for systems with a single amplifier can be supplied by most automotive electrical systems. Systems with multiple amplifiers may require a higher capacity battery, alternator or the use of a storage capacitor. We strongly recommend the use of a Directed Audio Essentials power capacitor with an extra battery in larger stereo systems.

Orion amplifiers generate a certain amount of heat as part of normal operation. Be sure the area around the amplifier is unobstructed to allow adequate air circulation. Remember, beach blankets, last week's laundry, school books and homework papers located on top of the amplifier do not improve air flow and may become damaged.

Tools of the Trade

Listed below are the majority of the tools required to perform an installation. Having the proper tools will make the installation that much easier. Some of these tools are necessities. Some just make the job easier.

- Allen Wrenches (2.5mm and 3mm)
- DMM or VOM
- Electric drill with assorted drill bits
- Grommets
- Heat shrink tubing
- Marking pen
- Nylon tie straps
- Phillips and flat blade screw drivers
- Pliers (standard and needle nose)
- Reference CD with 1 kHz Sine Wave at 0dB level (all bits high)
- RTA (real time analyzer)
- Soldering iron and solder
- Utility knife
- Wire brush or sandpaper for chassis grounding
- Wire crimper
- Wire cutters
- Wire strippers

Step By Step Installation

Step 1 Determine the location for the amplifier. Refer to the *Choosing Mounting Locations* section of this guide for detailed information.

Step 2 Decide on the system configuration for your amplifier. For system suggestions, refer to the *Speaker Connections* section of this guide.

Step 3 Run all the wires from the amplifier location to the speakers, source unit, and battery. Do not connect the battery at this time. Be sure to run RCAs and power and speaker wires away from factory electrical wires and system as they pose a great potential for induced system noise.

Step 4 Pre-drill amplifier mounting holes. Be sure to "think before you drill". Gas tanks, fuel lines, and other obstructions have a nasty way of hiding themselves. For best results use a marking pen to mark the mounting holes and pre-drill these holes with a standard 1/8" drill bit.

Step 5 Mount the amplifier. Make sure the amplifier is mounted on a flat surface. If this is not possible, do not over tighten the screws so that the chassis of the amplifier is twisted or bent.

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Step 6 Turn the vehicle's key switch to the off position.

Step 7 Disconnect the vehicle's battery ground terminal.

Step 8 Connect the RCA and speaker wires to the amplifier. Check the quality of your speakers and signal connections. This will determine the ultimate performance of your Orion amplifier. Refer to the *Signal Input and Output Level Controls* and *Speaker Connections* sections of this manual for correct wiring instructions.

Step 9 Connect power wires to the amplifier. At this time do not connect the fuse at the main battery.

Step 10 Reconnect the ground terminal to the battery.

Step 11 Set crossovers. Refer to the *Internal Crossover Configuration* section of this manual for detailed instructions.

Step 12 Once satisfied that all connections and settings are correct, install the fuse located near the vehicle's battery and proceed to the *Testing the System* section of this manual.

WARNING! Never exceed the recommended fuse size of this amplifier. Failure to do so will result in voiding of your warranty and possible damage to the amplifier.

SET UP AND TROUBLESHOOTING

Testing the System

After you have completed the installation, you need to test the system. This will help ensure years of trouble-free operation. Please refer to the listed steps below when testing the sound of your Orion system.

Step 1 Check all the wiring connections to be sure they are correct and secure.

Step 2 Turn the signal source volume control all the way down. Set any tone controls to their flat or defeated positions. This includes the loudness control.

Step 3 Turn the level controls of the amplifier to their minimum positions.

Step 4 Turn the source unit on. Check to see if the power LED located on the connection side of the amplifier is on. If not, please refer to the *Power Connections* and the *Troubleshooting Tips* sections of this manual for instructions.

Step 5 If using an aftermarket source unit, turn the level controls of the amplifier about one quarter of a turn. Slowly increase the volume level of the source unit to so that you can hear the output of the system. If no sound is heard or if the output is distorted, turn the system off immediately. Refer to the *Power Connections* and the *Troubleshooting Tips* sections of this manual to solve your installation problems.

Step 6 Check to make sure the output for each channel is correct. If the active crossovers are used, check to make sure that each output is correct from the amplifier. When using active crossovers on midrange and tweeters, do not use crossover frequencies lower than recommended. If the system is not configured properly, refer to the *Internal Crossover Configuration* section of this manual and take corrective action.

Step 7 If the output is clear and undistorted, continue to the *Adjusting the Sound of the System* section of this manual.

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Adjusting the Sound of the System

Once you have checked the system's operation, adjust the sound of the system. Adjusting the sound of the system is accomplished by setting the level controls and adjusting the internal crossovers.

Step 1 Turn the signal source volume control all the way down. Set any tone controls to their flat or defeated positions. This includes the loudness control.

Step 2 Turn the level controls of the amplifier to their minimum positions.

Step 3 Choose music with high dynamic content that you like, with which you are familiar, and will be used most often in the system.

Step 4 Turn the source unit's volume control up to its highest undistorted output level. If you lack test equipment, this point occurs between 3/4 to full volume depending on the quality of your source unit. Listen for any audible distortion. If any distortion is audible, reduce the volume of the source unit until you have an undistorted output. Leave the volume control at this position during your system tuning.

Step 5 While listening to your chosen dynamic music, turn up the level control corresponding to the midrange output until you hear slight distortion and turn the level control back slightly for an undistorted output. Depending on your system, the midrange and tweeter output may be on the same output channels.

Step 6 Turn up the level control corresponding to the tweeter output until you hear slight distortion and turn back the level control slightly for an undistorted output. Depending on your system the midrange and tweeter output may be on the same output channels.

Step 7 Fine-tune the output level between midrange and tweeters. Refer to the *Internal Crossover Configuration* section of this manual for detailed instructions.

Step 8 Repeat Steps 5-7 for the rear speakers. If you do not have rear speakers continue to Step 10.

Step 9 Set levels between the front and rear midrange and tweeters for optimum front/rear balance.

Step 10 Turn up the level control corresponding to the woofer output until you hear slight distortion and turn back the level control slightly for an undistorted output.

Step 11 Fine-tune the output level between satellite speakers and the woofers. Refer to the *Internal Crossover Configuration* section of this manual for detailed instructions. If using an RGC-1, adjust the level to the output of the woofer to match the sonic requirements of the system.

Step 12 Enjoy your awesome Orion sound system.

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Troubleshooting Tips

Symptom	Probable Cause	Action To Take
No output		
	Low or no remote turn-on	Check remote turn-on voltage at voltage amplifier and repair as needed.
	Fuse blown	Check power wire's integrity and check for speaker shorts. Fix as needed and replace fuse.
	Power wires not connected	Check power wire and ground connections and repair or replace as needed.
	Audio input not connected	Check RCA connections and repair or replace as needed.
	Speaker wires not connected	Check speaker wires and repair or replace as needed.
	Speakers are blown	Check system with known work ing speaker and repair or replace speakers as needed.
Audio cycles on and off		
	Thermal protection engages when amplifier heatsink temperature exceeds 90°C (190°F)	Make sure there is proper venti lation for amplifier and improve ventilation as needed.
	Loose or poor audio input	Check RCA connections and repair or replace as needed.
	Loose power connections	Check power wire and ground connections and repair or replace as needed.
Distorted output		
	Amplifier level sensitivity set too high exceeding maximum capability of amplifier	Readjust gain. Refer to the *Adjusting the Sound of the System* section of this manual for detailed instructions.
	Impedance load to amplifier too low	Check speaker impedance load, if below 4W mono or 2W stereo, rewire speakers to achieve higher impedance.
	Shorted speaker wires	Check speaker wire connections and fix or replace as needed.
	Speaker not connected to amplifier properly	Check speaker wiring and repair or replace as needed. Refer to the *Speaker Connections* section of this guide for detailed instructions.

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Symptom	Probable Cause	Action To Take
Distorted output		
	Internal crossover not set properly for speakers	Readjust crossovers. Refer to the *Internal Crossover Configuration* section of this guide for detailed instructions.
	Speakers are blown	Check system with known work ing speakers and fix or replace as needed.
Poor bass response		
	Speakers wired with wrong polarity causing cancellation at low frequencies	Check speaker polarity and fix as needed.
	Crossover set incorrectly	Reset crossovers. Refer to the *Internal Crossover Configuration* section of this guide for detailed instructions.
	Impedance load at amplifier is too low	Check speaker impedance load, if below 4W mono or 2W stereo, rewire speakers to achieve higher impedance.
Battery fuse blowing		
	Short in power wire or incorrect wiring	Check power and ground con nections and replace or repair as needed.
	Fuse used is smaller than recommended	Replace with proper fuse size.
	Actual current exceeds fuse rating	Check speaker impedance load. If below 4W mono or 2W stereo, rewire speakers to achieve higher impedance.
Amplifier fuse blowing		
	Fuse used is smaller than recommended	Replace with proper fuse size.
	Impedance load at amplifier too low	Check speaker impedance load. If below 4W mono or 2W stereo, rewire speakers to achieve higher impedance.
	Speaker is blown with shorted outputs	Check system with known work ing speakers and fix or replace as needed.
	Actual current exceeds fuse rating	Check speaker impedance load. If below 4W mono or 2W stereo, rewire speakers to achieve higher impedance.

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NOTES

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Warranty

LIMITED TWO YEAR CONSUMER WARRANTY:

Directed Electronics, Inc. promises to the original purchaser, to replace this product should it prove to be defective in workmanship or material under normal use, for a period of two years from the date of purchase by the dealer as indicated by the date code marking of the product **PROVIDED** the product was installed by an authorized Directed dealer. During this two year period, there will be no charge for this replacement **PROVIDED** the unit is returned to Directed, shipping pre-paid. If the unit is installed by anyone other than an authorized Directed dealer, the warranty period will be 1 year from date of purchase by the dealer as indicated by the date code marking of the product. During this 1 year period, there will be no charge for this replacement **PROVIDED** the unit is returned to Directed, shipping pre-paid. This warranty is non-transferable and does not apply to any unit that has been modified or used in a manner contrary to its intended purpose, and does not cover damage to the unit caused by installation or removal of the unit. This warranty is void if the product has been damaged by accident or unreasonable use, neglect, improper service or other causes not arising out of defects in materials or construction. **ALL WARRANTIES INCLUDING BUT NOT LIMITED TO EXPRESS WARRANTY, IMPLIED WARRANTY, WARRANTY OF MERCHANTABILITY, FITNESS FOR PARTICULAR PURPOSE, AND WARRANTY OF NON-INFRINGEMENT OF INTELLECTUAL PROPERTY ARE EXPRESSLY EXCLUDED TO THE MAXIMUM EXTENT ALLOWED BY LAW, AND DIRECTED NEITHER ASSUMES NOR AUTHORIZES ANY PERSON TO ASSUME FOR IT ANY LIABILITY IN CONNECTION WITH THE SALE OF THE PRODUCT. DIRECTED HAS ABSOLUTELY NO LIABILITY FOR ANY AND ALL ACTS OF THIRD PARTIES INCLUDING ITS AUTHORIZED DEALERS OR INSTALLERS.** Unit must be returned to Directed, postage pre-paid, with: consumer's name, telephone number, and address, authorized dealer's name and address, and product description. **IN ORDER FOR THIS WARRANTY TO BE VALID, YOUR UNIT MUST BE SHIPPED WITH PROOF OF INSTALLATION BY AN AUTHORIZED DIRECTED DEALER. ALL UNITS RECEIVED BY DIRECTED FOR WARRANTY REPAIR WITHOUT PROOF OF DIRECTED DEALER INSTALLATION WILL BE COVERED BY THE LIMITED 1 YEAR PARTS AND LABOR WARRANTY.** Note: This warranty does not cover labor costs for the removal and reinstallation of the unit.

BY PURCHASING THIS PRODUCT, THE CONSUMER AGREES AND CONSENTS THAT ALL DISPUTES BETWEEN THE CONSUMER AND DIRECTED SHALL BE RESOLVED IN ACCORDANCE WITH CALIFORNIA LAWS IN SAN DIEGO COUNTY, CALIFORNIA.

Directed Electronics is a proud member of IASCA

ISO 9001

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